

### REMARKS

#### 35 U.S.C §101

The examiner rejected Claims 1, 3-14, 16-20 under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The examiner stated:

Claims 1 and 3-10 recite only a mental process of matching without integrating a machine, or constituting a process of manufacture, or the altering a composition of matter.

**"Following the lead of the Supreme Court, this court and our predecessor court have refused to find processes patentable when they merely claimed a mental process standing alone and untied to another category of statutory subject matter even when a practical application is claimed." *In re Comiskey*, 499 F.3d 1365 (Fed. Cir. 2007).**

**Claims 11-14, 16 and 17 recite a "system" in the preamble, however the body of the claims recite only a mental process of matching. "the patent statute does not allow patents on particular systems that depend for their operation on human intelligence alone..." *In re Comiskey*, 499 F.3d 1365 (Fed. Cir. 2007).**

**Claims 18-20 constitute unpatentable subject matter under 35 U.S.C. 101 because no physical medium is recited in these claims onto which the instructions are captured in tangible form. In this case, the applicant is claiming a "computer program product", which in its broadest reasonable interpretation could be read as a signal. A signal under the holding of *Nuijten* (*In re Nuijten*, 500 F.3d 1346, 84 USPQ2d 1495 (Fed. Cir. 2007), is a transitory item and is not considered statutory subject matter. Furthermore, a claim to software, program, code not clearly on any medium is therefore considered not pertaining to one of the statutory classes of method, apparatus, article of manufacture, or composition of matter) physical things.**

Applicant disagrees, but in order to advance prosecution has amended the claims to clearly direct the claims to statutory subject matter. Claim 1 now calls for a "computer implemented method," and positively recites the use of a computer in the actions of "receiving by a computer system ... ." Claim 1 is now clearly directed to statutory subject matter, as are its dependent claims.

Claim 11, as amended, is directed to a system including a computer system comprising, a processor, memory coupled to the processor and a computer storage medium storing a computer program product comprising instructions to cause the computer system to ... ." Claim 11 is now

directed to a system including a computer system and is clearly statutory subject matter, as are its dependent claims.

Claim 18, as amended, calls for "A computer program product residing on a computer readable medium for operating a trading system comprises instructions for causing a computer to:" Claim 18 is now directed to a physical medium and is clearly statutory subject matter, as are its dependent claims.

These claim amendments are supported in the specification. See for example page 3, lines 2-25; FIG. 1. No new matter has been added.

35 U.S.C § 103

The examiner rejected Claims 1, 3, 6-12, 14, 17, 18, 20 under 35 U.S.C. 103(a) as being unpatentable over Tilfors et al. (U.S. Patent No. 6,405,180).

The examiner stated:

**Re claim 1: Tilfors disclose:**

**A method of executing an order in a market system (col. 1, lines 14-19), comprising:**  
**receiving an order from a customer of a market participant (Fig. 1 and col.4 lines 6-15);**  
**for the order, checking if a market participant identification associated with the order from the customer matches a market participant identification representing a quote in the system which is at the best bid or best offer price in the system (Tilfors checks the market participant identification associated with the order as being one of a customer, a firm or another market maker. Col. 4, lines 15-17));**  
**and if the market participant identification matches the market participant identification representing a best bid or offer quote in the system,**  
**matching off the customer order against the one of the best bid or best offer quote of the matching market participant identification that is at the opposite side of the market irrespective of any other priority established for matching orders in the system (Tilfors discloses using different types of trading procedures based on the types of counterpart being matched (col. 4, lines 18-26) all the while insuring that the quote in the system being used is at a best bid or best offer (col. 4 lines 37-45)). Tilfors provide for a procedure for executing a trade for matching prices between two market makers (col. 5 lines 55-67, col. 6 lines 1-14). Furthermore, it is obvious that Tilfors matches off the customer order against the one of the best bid or best offer quote of the matching market participant identification that is opposite irrespective of any other priority established for matching orders in the system because Tilfors discloses "it is desired that the spread be smaller than it is today, without forcing the market makers to take the risk of making undesired matches" (see cols. 1-2).**

Claim 1 includes the features of ... receiving ... an order from a customer of a market participant ... checking if a market participant identification associated with the order ... matches a market participant identification representing a quote in the computer system which is at a best bid or best offer price in the computer system and if the market participant identification matches ... matching off the customer order against the one of the best bid or best offer quote of the matching market participant identification that is at an opposite side ... irrespective of any other priority established for matching orders in the computer system.

The examiner contends that “checking if a market participant identification associated with the order from the customer matches a market participant identification representing a quote in the system which is at the best bid or best offer price in the system (Tilfors checks the market participant identification associated with the order as being one of a customer, a firm or another market maker. Col. 4, lines 15-17)).” While the examiner argues that Tilfors checks the order to determine if it came from a customer, firm or another market maker, that is not directed to the claimed feature of “checking if a market participant identification associated with the order ... matches a market participant identification representing a quote in the computer system which is at a best bid or best offer price.”

Tilfors uses the type of investor to set the volume at which a market maker will execute the order. However, “checking if a market participant identification associated with the order ... matches a market participant identification of the best quote” is of no consequence to the system described and suggested by Tilfors. Tilfors does not check to see if the order belongs to a customer of a particular market maker, but merely checks to see the type of order, e.g., a customer, firm or other market maker order.

The examiner contends that “Tilfors discloses using different types of trading procedures based on the types of counterpart being matched (col. 4, lines 18-26) all the while insuring that the quote in the system being used is at a best bid or best offer (col. 4 lines 37-45)).” Claim 1 by contrast requires “matching off the customer order against the one of the best bid or best offer quote of the matching market participant identification that is at an opposite side ... irrespective of any other priority established for matching orders in the computer system.” Tilfors does not have the concept of a matching market participant, that is, Tilfors does not have a participant check if the order belongs to a customer of the market participant that has quotes in the system.

Moreover, claim 1 requires that matching occurs “irrespective of any other priority established for matching orders in the ... system.” Tilfors as best as Applicant can determine does not address priority in the disclosed system. While Tilfors mentions a simple first in first served model in the matching, Tilfors does not match the order irrespective of this priority, as required by the claim.

The examiner also argues that: “Tilfors provide for a procedure for executing a trade for matching prices between two market makers (col. 5 lines 55-67, col. 6 lines 1-14). Furthermore, it is obvious that Tilfors matches off the customer order against the one of the best bid or best offer quote of the matching market participant identification that is opposite irrespective of any other priority established for matching orders in the system because Tilfors discloses “it is desired that the spread be smaller than it is today, without forcing the market makers to take the risk of making undesired matches” (see cols. 1-2).” Applicant points out that this reasoning is erroneous. First, the claimed feature is to a customer order and a market participant (e.g., a market maker), but not between two market makers. Second, matching off against the best bid/offer is may have some relevance to the spread, but has no relevance to matching priority as argued by the examiner. The examiner has not explained how “forcing the market makers to take the risk of making undesired matches” relates to the claimed subject matter.

### Claim 3

Claim 3 further requires “wherein matching off the order without regard to any priority is with respect to a time priority of a plurality of quotes in the computer system, at the opposite side of the market to the customer order.

The examiner argues that:

#### **Re claim 3: Tilfors discloses:**

wherein matching-off the order without regard to any priority is with respect to a time priority of other quotes in the system, at the opposite side of the market to the customer order -see col. 1. Tilfors discloses that in existing exchange systems, a simple first in first served model [time priority] in matching is commonly used. The first in first served model forces the market makers to take the risk of making undesired matches because of the requirement by the exchange for market makers to enter two way quotes. Tilfors provides a method of matching based on different or type of counterpart, as well as parameters specified by the market maker -see col. 2.

While Tilfors mentions first in first served, Tilfors does not suggest to ignore this priority when the conditions of the base claim are matched, namely the market participant identification associated with the order matches the market participant identification representing a quote at best bid or best offer price and that matching off the customer order against the quote of the matching market participant identification occurs irrespective of any other priority established for matching.

Claims 6-12, 14, 17, 18, 20 contain analogous limitations as claims 1 and/or 3 and are therefore allowable for analogous reasons.

The examiner rejected Claims 4, 5, 13, 16, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tilfors in view of May (U.S. Patent No. 6,421,653).

Claim 4 recites "calling a cancel request to cancel a quote at the side of the market in which a matched off order will be executed," is allowable at least for the reasons discussed in conjunction with their respective base claims.

It is believed that all the rejections and/or objections raised by the examiner have been addressed.

In view of the foregoing remarks, applicant respectfully submits that the application is in condition for allowance and such action is respectfully requested at the examiner's earliest convenience.

All of the dependent claims are patentable for at least the reasons for which the claims on which they depend are patentable.

Canceled claims, if any, have been canceled without prejudice or disclaimer.

Any circumstance in which the applicant has (a) addressed certain comments of the examiner does not mean that the applicant concedes other comments of the examiner, (b) made arguments for the patentability of some claims does not mean that there are not other good reasons for patentability of those claims and other claims, or (c) amended or canceled a claim does not mean that the applicant concedes any of the examiner's positions with respect to that claim or other claims.

Applicant : Peter Martyn et al.  
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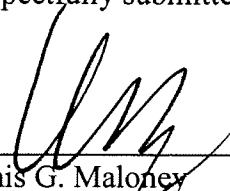
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Please charge the Petition for Extension of Time fee of **\$120** and please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: \_\_\_\_\_

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Denis G. Maloney  
Reg. No. 29,670

Fish & Richardson P.C.  
225 Franklin Street  
Boston, MA 02110  
Telephone: (617) 542-5070  
Facsimile: (617) 542-8906